Fig.1A

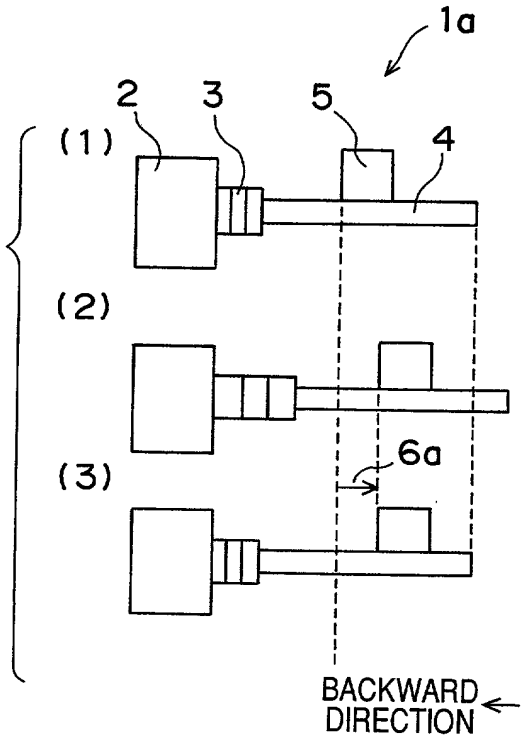


Fig.1B

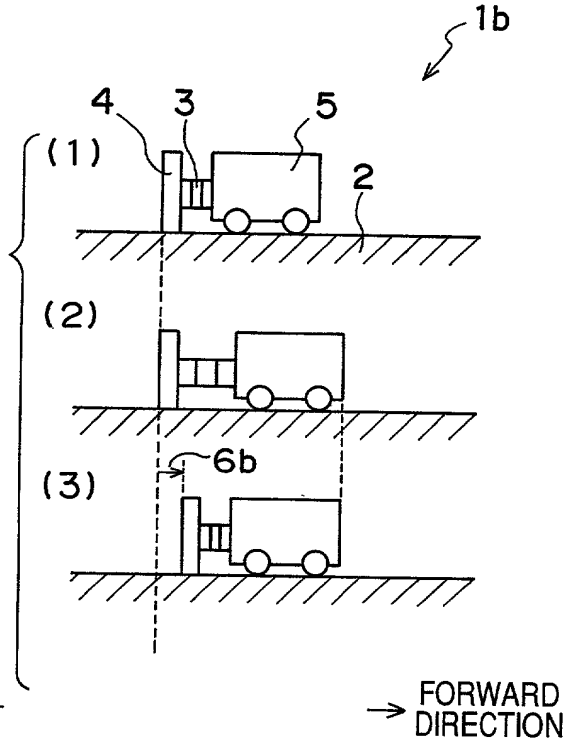


Fig.1C

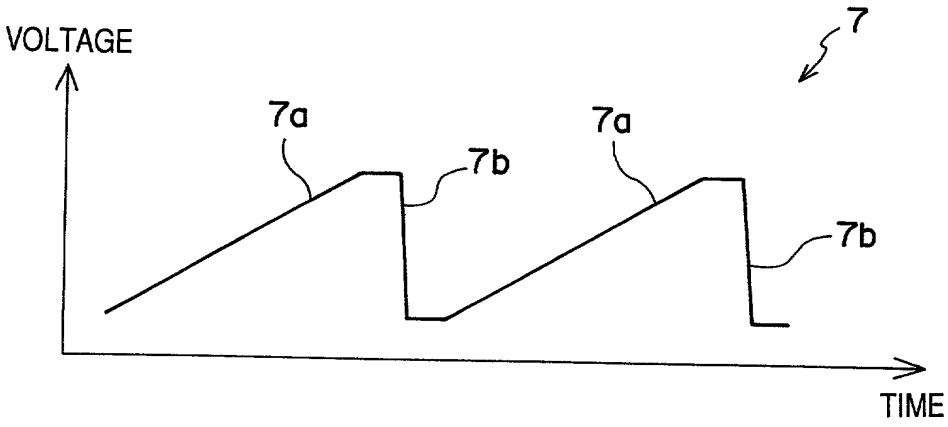


Fig.2A

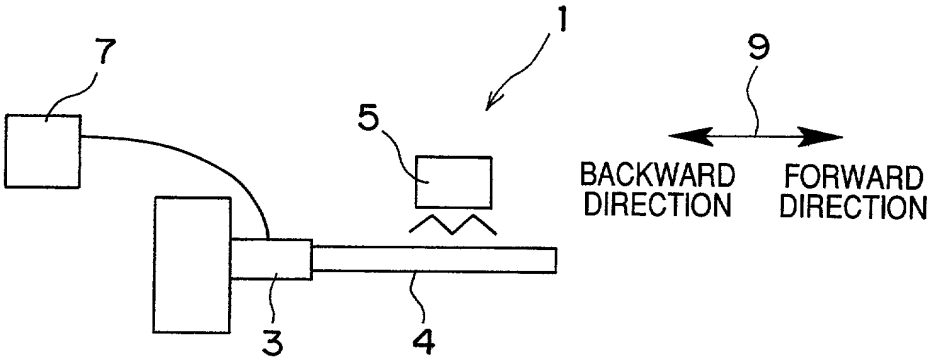


Fig.2B

MOTION OF DRIVE ROD	ADVANTAGEOUS EFFECT
 8a	MOVING BODY MOVES FORWARD
 8b	MOVING BODY MOVES BACKWARD
 8c	FRICTION REDUCES

Fig.3A

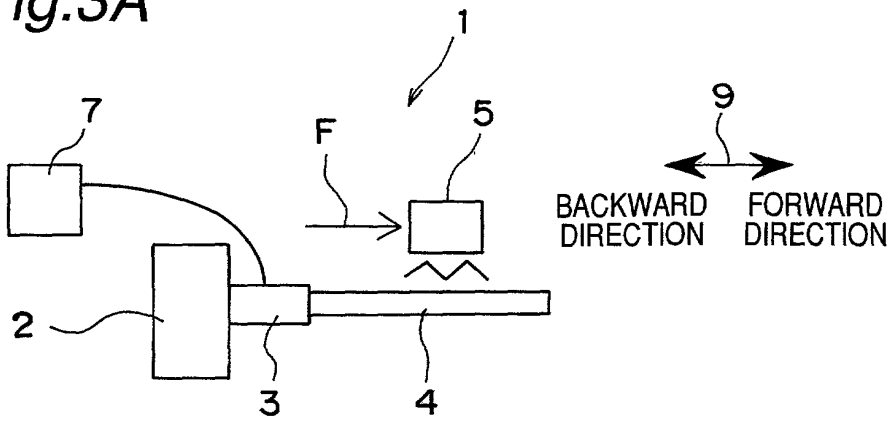

1
7
F
5
9
BACKWARD DIRECTION
FORWARD DIRECTION
2
3
4

Fig.3B

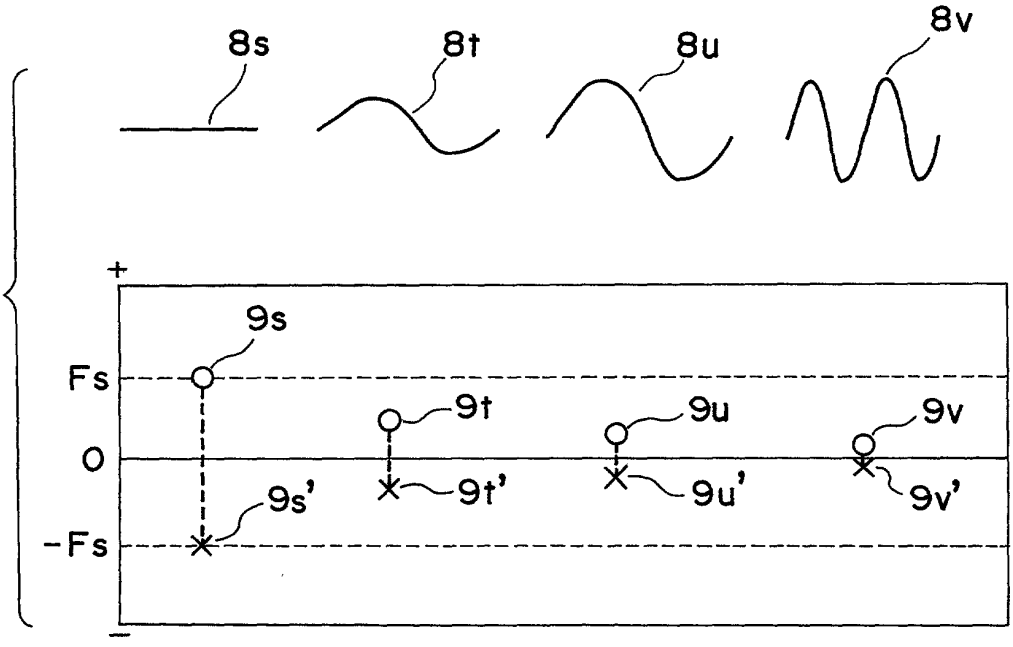

8s
8t
8u
8v
+
9s
Fs
9t
9u
9v
0
9s'
9t'
9u'
9v'
-Fs
−

Fig.4A

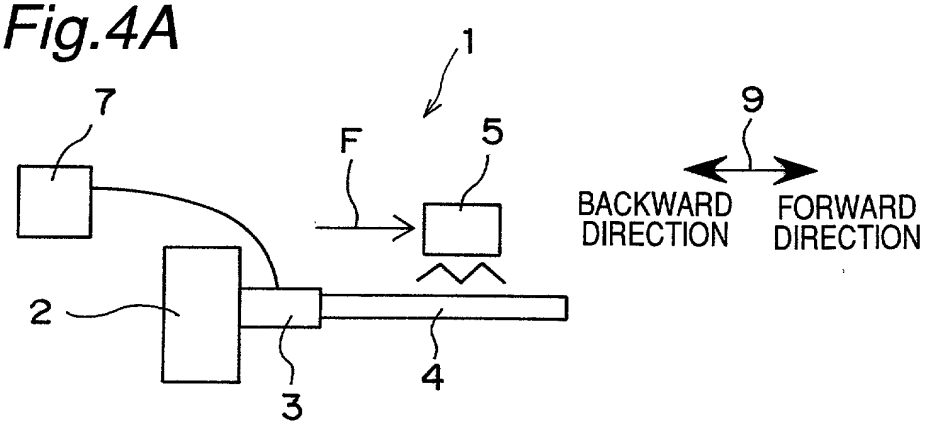
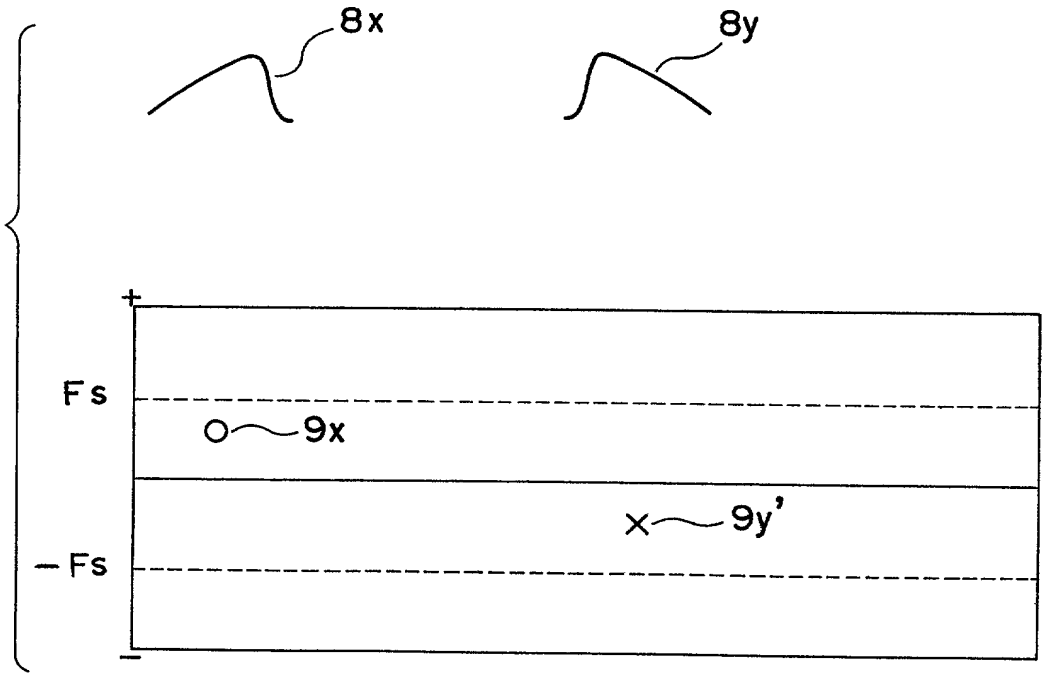

1
7
F
5
9
BACKWARD DIRECTION
FORWARD DIRECTION
2
3
4

Fig.4B


8x
8y
+
Fs
9x
9y'
−Fs
−

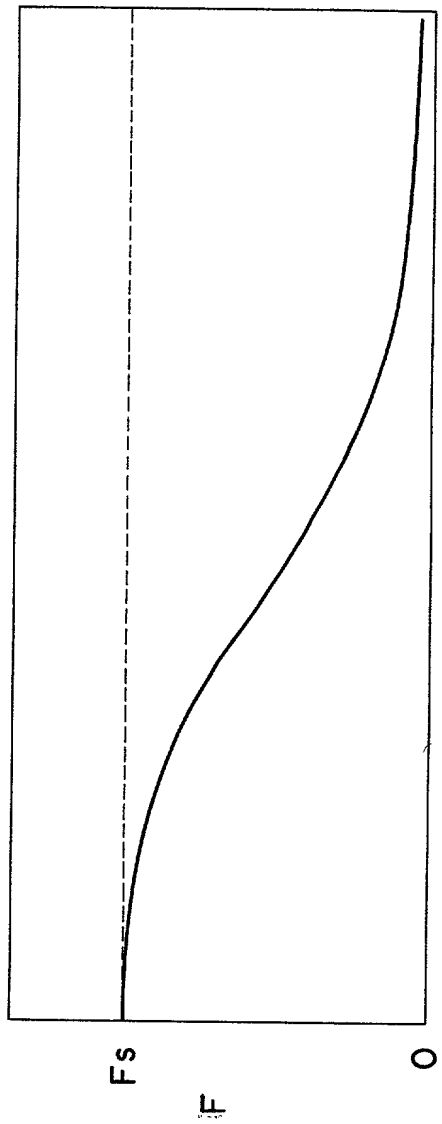


Fig.5

Fig.6

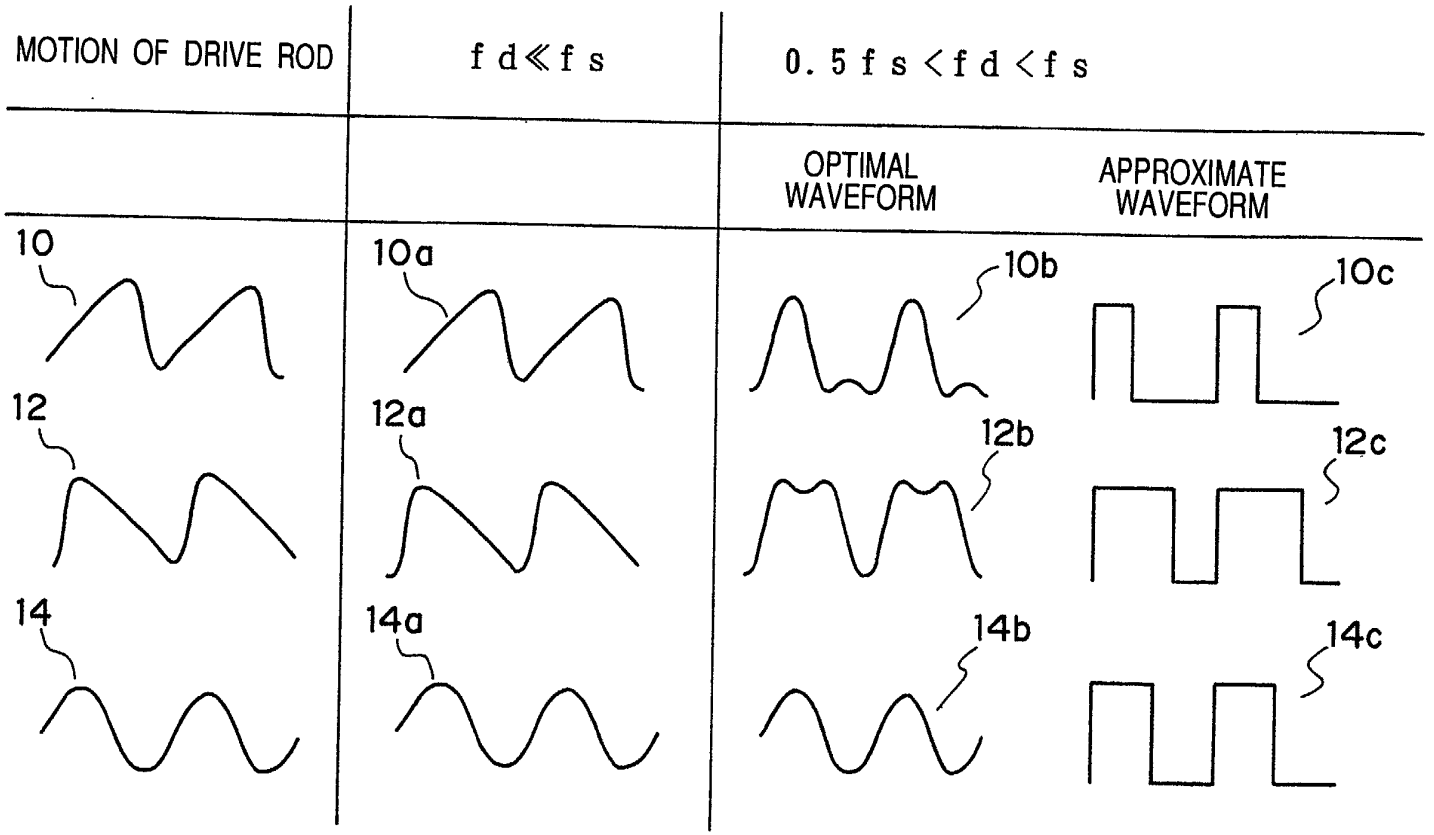


Fig.7A

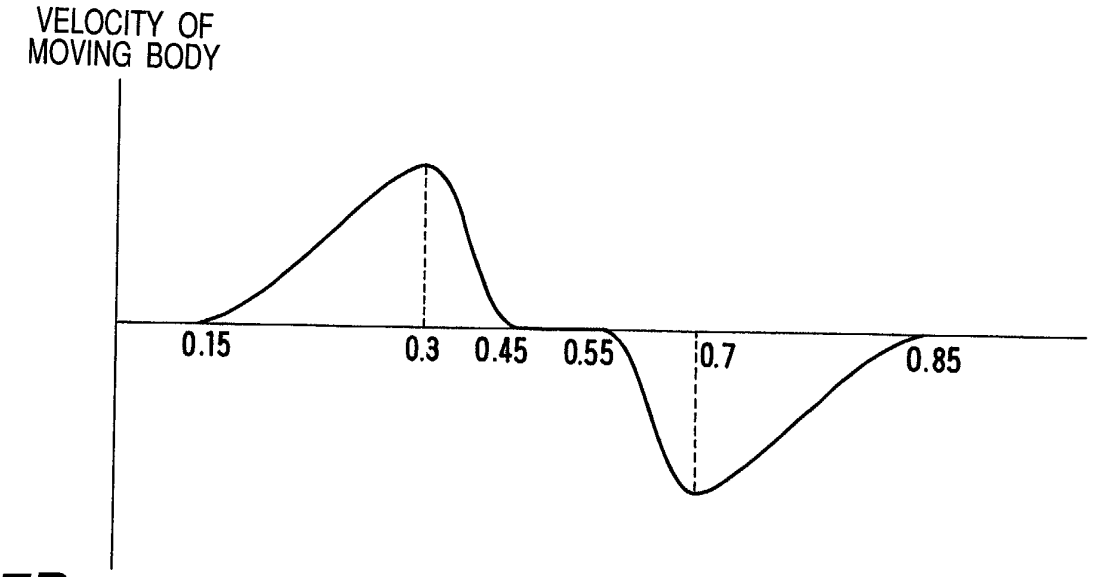


Fig.7B

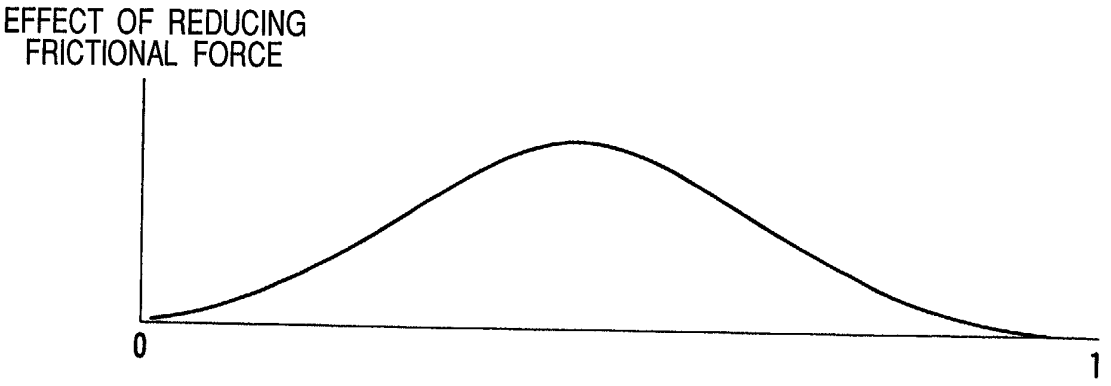


Fig.8A

d=0

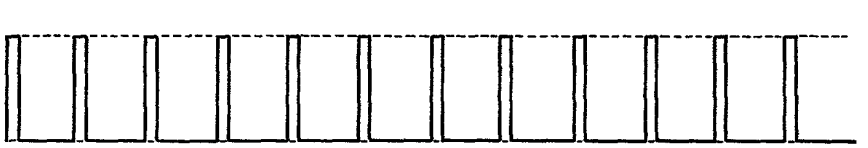


Fig.8B

d=0.1

Fig.8C

d=0.3

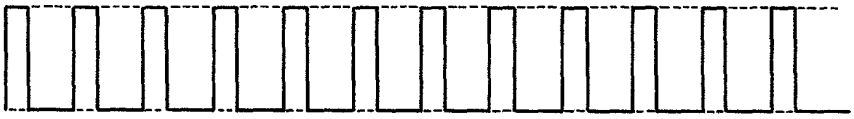


Fig.8D

d=0.5

Fig.8E

d=0.7

Fig.8F

d=0.9

Fig.8G

d=1

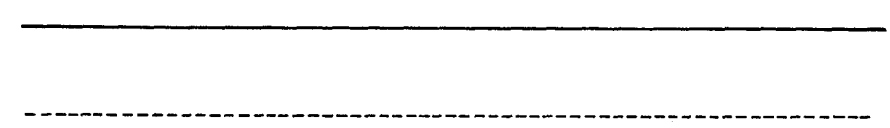


Fig.9A

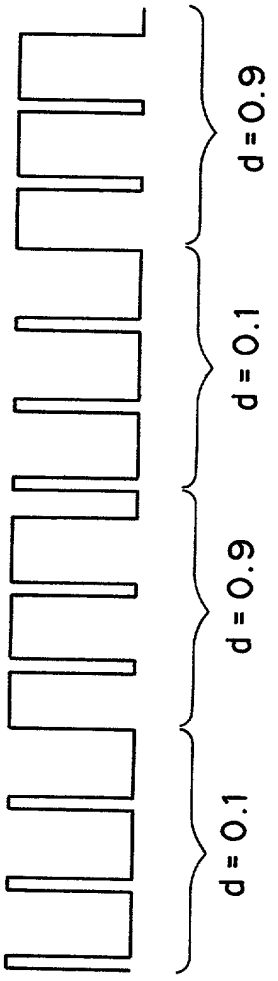


Fig.9B

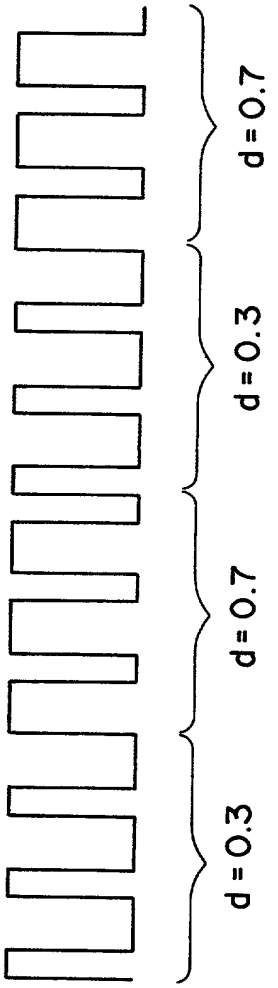


Fig.10A

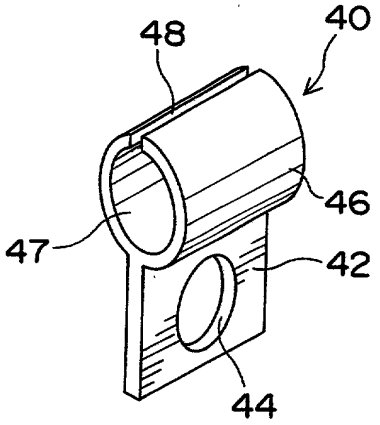


Fig.10B

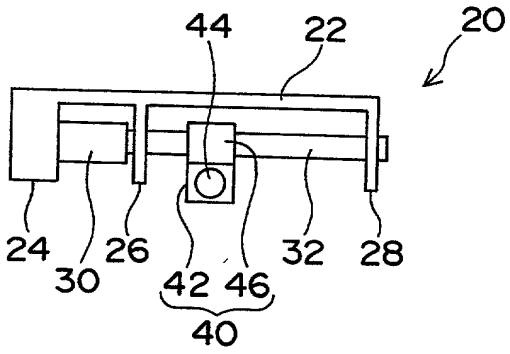


Fig.10C

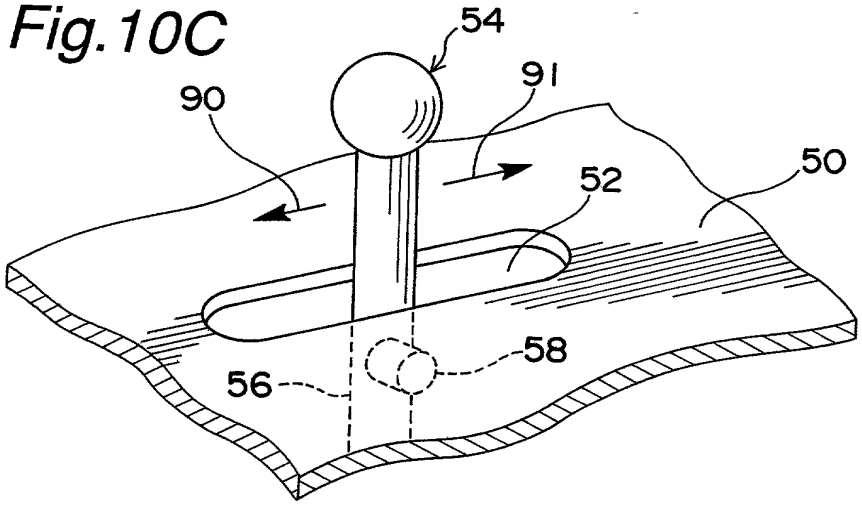


Fig.10D

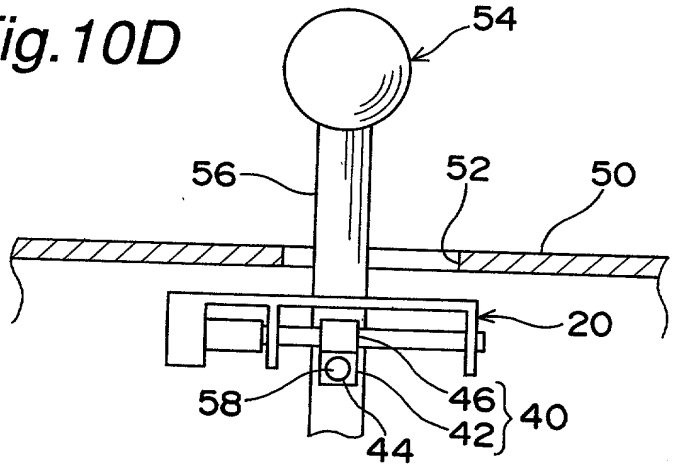


Fig.11A

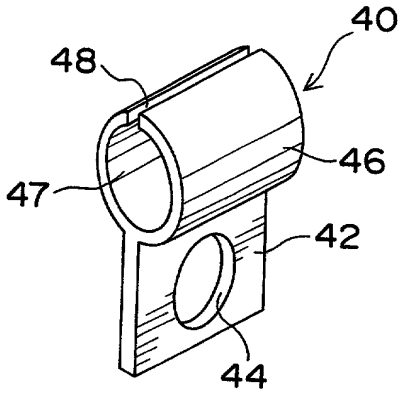


Fig.11B

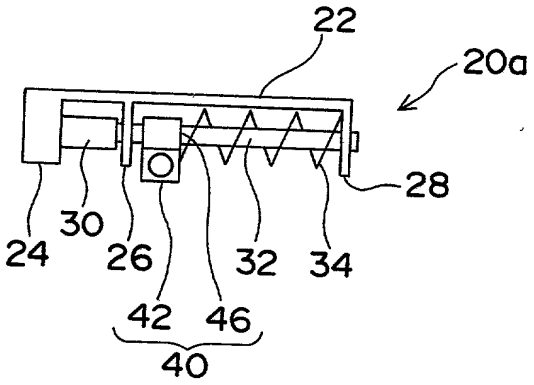


Fig.11C

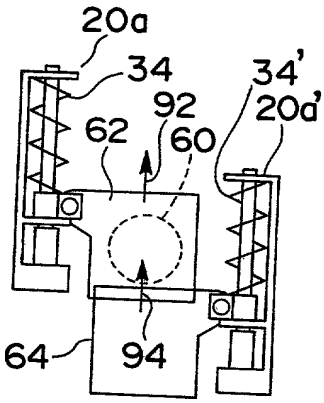


Fig.11D

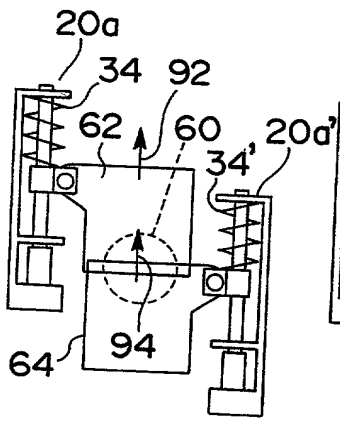


Fig.11E

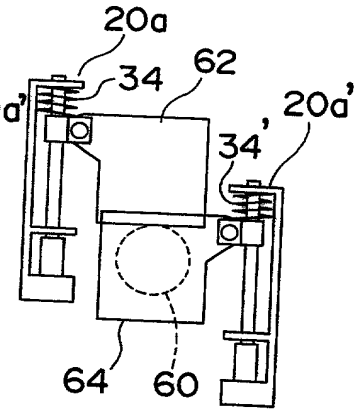


Fig.11F

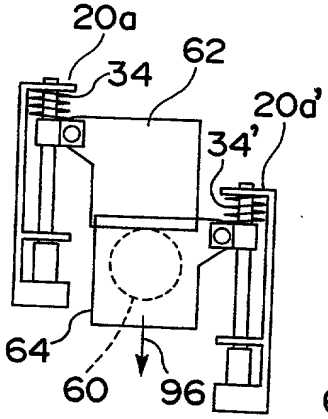


Fig.11G

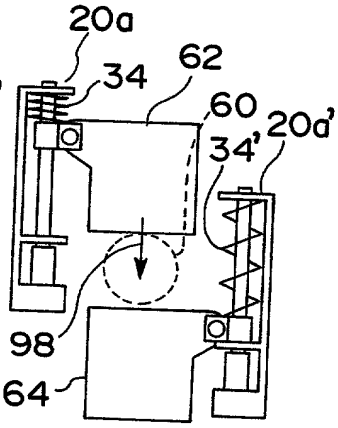


Fig.11H